Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Cargill, Inc.
Facility Location: 1016 Clark Street, Sioux City, IA 51102
Air Quality Operating Permit Number: 99-TV-013R1
Expiration Date: September 10, 2008

EIQ Number: 92-0769
Facility File Number: 97-01-001

Responsible Official
Name: Tom Katalinich
Title: Facility Superintendent
Mailing Address: 1016 Clark Street, Box 357, Sioux City, IA 51102
Phone #: 712-279-1232

Permit Contact Person for the Facility
Name: Tom Katalinich
Title: Facility Superintendent
Mailing Address: 1016 Clark Street, Box 357, Sioux City, IA 51102
Phone #: 712-279-1232

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

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Douglas A. Campbell, Supervisor of Air Operating Permits Section Date

Table of Contents

Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulations
^{o}F.....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
gr./dscf.....grains per dry standard cubic foot
IAC.....Iowa Administrative Code
IDNR.....Iowa Department of Natural Resources
MVAC.....motor vehicle air conditioner
NSPS.....new source performance standards
lb./hr .....pounds per hour
lb./MMBtu.....pounds per million British thermal units
MMBtu/hr .....million British thermal units per hour
MMCF/hr .....million cubic feet per hour
USEPA.....United States Environmental Protection Agency

Pollutants
PM.....particulate matter
PM10.....particulate matter less than 10 microns in diameter
SO_2.....sulfur dioxide
NO_x .....nitrogen oxides
VOC.....volatile organic compounds
CO.....carbon monoxide
HAP.....hazardous air pollutants

I. Facility Description and Equipment List

Facility Name: Cargill, Inc., Sioux City
Permit Number: 99-TV-013R1

Facility Description: Grain Processing

Equipment List

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description
1.00	1.01	Conveyor
	1.02	Grain Cleaner
	1.03	Grinder
2.00	2.01	Conveyors
	2.02	Cracking & Dehulling
4.00	4.01	Hull Grinding
5.00	5.01	Meal Drying
	5.02	Meal Cooling
	5.03	Conveying
05A	05A.01	Meal Dryer/Cooler Deck #1
6.00	6.01	Meal Dust Grinders
	6.02	Drag Conveyor
	6.03	Sifters
7.00	7.01	Meal Storage Conveying
	7.02	Sifter
	7.03	Grinder
8.00	8.01	Meal Rail Loadout
	8.02	Meal Truck Loadout
	8.03	Meal Loadout Transfer Conveyor
9.00	9.01	Clay Storage Bin
10.00	10.01	Clay Handling
11.00	11.01	Bean Tank Conveyance
12.00	12.01	Elevator Aspiration
13.00	13.01	Flaking
	13.02	Conveying
13A	13A.01	Flaking
	13A.02	Conveying

Equipment List (Continued)

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description
15.00	15.01	Hull Transfer Storage
16.00	16.01	Vegetable Oil Processing Hexane Emissions
17	17.01	External Combustion Boiler
18.00	18.01	Dowtherm Boiler (External Combustion Boiler)
19.00	19.01	Reformer (External Combustion Boiler)
20	20.01	Conveying
21.00	21.01	Grain Dryer - Drying
	21.02	Grain Dryer - Burner
22	22.01	Grain Dryer II - Drying
	22.02	Grain Dryer II - Burner
23.00	23.01	Reconditioned Boiler
24.00	24.01	Trisyl Pneumatic Conveying
25.00	25.01	Trisyl Storage Tank
26.00	26.01	Grain Receiving-Truck Dump
	26.02	Grain Receiving-Conveyors & Legs
27	27.01	Bean Conditioner
28	28.01	Pellet Cooler
29	29.01	Deodorizing System Boiler
30	30	Meal Flow Additive Tank
31	31	Soybean CoProduct System Aspiration
32	32	Soybean CoProduct Loadout System
33	33	Vegetable Oil Refinery

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
None	None

II. Plant-Wide Conditions

Facility Name: Cargill, Inc., Sioux City
Permit Number: 99-TV-013R1

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 Years
Commencing on: September 11, 2003
Ending on: September 10, 2008

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

This permit has been renewed as part of a settlement agreement between Cargill's Sioux City Plant and the IDNR, as set out in Administrative Consent Order No. 2003-AQ-24. The permit was evaluated for CAM applicability for affected points. See Appendix B for a copy of the consent agreement.

Emission Limits
Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)[1]:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

[1] This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

Particulate Matter (federally enforceable)[2]:
The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.
Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

[2] This is the current language in the Iowa SIP, and is enforceable by EPA.

Plant-wide Operating Limit: *The plant shall be operated according to the following conditions:*

Process throughput:
Plant-wide HAPs shall not exceed 9.4 tons for any single HAP and 24.4 tons for all HAPs per twelve-month rolling total.

Reporting & Record keeping:
Plant-wide, record the emission of each HAP and all HAPs in tons per twelve-month rolling total.

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

Compliance Plan
The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Cargill, Incorporated – Sioux City is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Cargill, Incorporated – Sioux City shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

III. Emission Point-Specific Conditions

Facility Name: Cargill, Inc., Sioux City
Permit Number: 99-TV-013R1

Emission Point ID Number: 1.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 1.01, 1.02, & 1.03
Emissions Control Equipment ID Number: 1.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 1.01
Emission Unit Description: Conveyor
Raw Material/Fuel: Soybeans
Rated Capacity: 243 Tons/hr

Emission Unit vented through this Emission Point: 1.02
Emission Unit Description: Grain Cleaner
Raw Material/Fuel: Soybeans
Rated Capacity: 243 Tons/hr

Emission Unit vented through this Emission Point: 1.03
Emission Unit Description: Grinder
Raw Material/Fuel: Soybeans
Rated Capacity: 243 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 0.60 lb./hr, 0.005 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5
567 IAC 23.4(7)

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Compliance Testing Requirements

Particulate Matter	Method 5, 40 CFR 60
Particulate Matter	Iowa Compliance Sampling Manual
PM_{10}	Method 201A with 202, 40 CFR 51
Opacity	Method 9, 40 CFR 60

The owner shall verify compliance with the emission limitations contained in Construction Permit 95-A-323-S5 (2/6/01) within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the startup date of the proposed equipment. The test shall be conducted with the equipment operating in a manner representative of full rated capacity. Failure to test at this maximum may be cause to limit the source to operating at the level at which the compliance tests were conducted.

The following shall apply to all compliance tests:
1. Each test to be conducted shall be approved by the DNR.
2. Unless otherwise specified by the DNR, each test shall consist of three (3) separate runs. The duration shall be established by the DNR at the pretest meeting. The arithmetic mean of the three acceptable test runs shall apply for compliance, unless otherwise approved by the DNR.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Each meeting shall be attended by representatives of the DNR, the owner, and the testing firm, if any. It is the responsibility of the owner to coordinate and schedule each meeting. The DNR reserves the right to impose additional, different, or more detailed testing requirements. It shall be the responsibility of the owner to install the test ports.

Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 40.5
Stack Diameter (feet): 1.84
Stack Exhaust Flow Rate (acfm): 14,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 2.01 & 2.02
Emissions Control Equipment ID Number: 2.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 2.01
Emission Unit Description: Conveyors
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 2.02
Emission Unit Description: Cracking & Dehulling
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 0.24 lb./hr, 0.002 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S5
567 IAC 23.4(7)

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12
Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 62
Stack Diameter (feet): 2.17
Stack Exhaust Flow Rate (acfm): 14,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 4.00

Associated Equipment
Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 4.01
Emissions Control Equipment ID Number: 4.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 4.01
Emission Unit Description: Hull Grinding
Raw Material/Fuel: Soybean Hulls
Rated Capacity: 18 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

Pollutant: PM_{10}
Emission Limit(s): 0.137 lb./hr, 0.002 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5
567 IAC 23.4(7)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 36.6
Stack Diameter (feet): 1.67
Stack Exhaust Flow Rate (acfm): 8,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 5.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 5.01, 5.02, & 5.03
Emissions Control Equipment ID Number: 5.00
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 5.01
Emission Unit Description: Meal Drying
Raw Material/Fuel: Soybean Meal
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 5.02
Emission Unit Description: Meal Cooling
Raw Material/Fuel: Soybean Meal
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 5.03
Emission Unit Description: Meal Conveying
Raw Material/Fuel: Soybean Meal
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4

Pollutant: PM_{10}
Emission Limit(s): 2.9 lb./hr, 0.005 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4
567 IAC 23.4(7)

Pollutant: Particulate Matter
Emission Limit(s): 5.8 lb./hr, 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 85
Stack Diameter (inches): 66
Stack Exhaust Flow Rate (acfm): 72,800
Stack Temperature (^{o}F): 115
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes ☒ No ☐**

Facility Maintained Operation & Maintenance Plan Required? **Yes ☐ No ☒**

Compliance Assurance Monitoring (CAM) Plan Required? **Yes ☐ No ☒**

Agency Cyclone Operation & Maintenance

Monitoring Guidelines
The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Continuous

- If the "High Level" probe in the cyclone sets off an alarm indicating pluggage, remedial action will take place immediately.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Inspect the solids discharge valve for proper operation.
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Inspect the hopper unloading components.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be remove to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Inspect, calibrate, and recommission the "High Level" probe before the system is returned to service.

Maintain a written record of the observations, deficiencies, and any action resulting from the inspection.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspections.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 05A

Associated Equipment
Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 05A.01
Emissions Control Equipment ID Number:
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 05A.01
Emission Unit Description: Meal Dryer/Cooler Deck #1
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2

Pollutant: Particulate Matter
Emission Limit(s): 1.2 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2

Pollutant: PM_{10}
Emission Limit(s): 0.6 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 71
Stack Diameter (inches): 30.5
Stack Exhaust Flow Rate (acfm): 27,500
Stack Temperature (^{o}F): 190
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Agency Cyclone Operation & Maintenance

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Continuous

- If the "High Level" probe in the cyclone sets off an alarm indicating pluggage, remedial action will take place immediately.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly
- Inspect the solids discharge valve for proper operation.
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually
- Inspect the hopper unloading components.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be remove to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Inspect, calibrate, and recommission the "High Level" probe before the system is returned to service.

Maintain a written record of the observations, deficiencies, and any action resulting from the inspection.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping
- Maintain a record of all inspections and any action resulting from the inspections.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control
- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 6.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 6.01, 6.02, & 6.03
Emissions Control Equipment ID Number: 6.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 6.01
Emission Unit Description: Meal Grinders
Raw Material/Fuel: Soybean Meal
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 6.02
Emission Unit Description: Drag Conveyor
Raw Material/Fuel: Soybean Meal
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 6.03
Emission Unit Description: Sifters
Raw Material/Fuel: Soybean Meal
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S4

Pollutant: PM_{10}
Emission Limit(s): 0.24 lb./hr, 0.002 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S4
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 54
Stack Diameter (inches): 30
Stack Exhaust Flow Rate (acfm): 14,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 7.01, 7.02, & 7.03
Emissions Control Equipment ID Number: 7.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 7.01
Emission Unit Description: Meal Storage Conveying
Raw Material/Fuel: Soybean Meal
Rated Capacity: 375 tons/hr

Emission Unit vented through this Emission Point: 7.02
Emission Unit Description: Sifter
Raw Material/Fuel: Soybean Meal
Rated Capacity: 375 tons/hr

Emission Unit vented through this Emission Point: 7.03
Emission Unit Description: Grinder
Raw Material/Fuel: Soybean Meal
Rated Capacity: 375 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4

Pollutant: PM_{10}
Emission Limit(s): 0.154 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.309 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4
567 IAC 23.4(7)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 25
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (acfm): 6,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 8.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 8.01, 8.02, 8.03 & 8.04
Emissions Control Equipment ID Number: 8.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 8.01
Emission Unit Description: Meal Rail Loadout
Raw Material/Fuel: Meal
Rated Capacity: 375 tons/hr

Emission Unit vented through this Emission Point: 8.02
Emission Unit Description: Meal Truck Loadout
Raw Material/Fuel: Meal
Rated Capacity: 375 tons/hr

Emission Unit vented through this Emission Point: 8.03
Emission Unit Description: Meal Loadout Transfer Conveyor
Raw Material/Fuel: Meal
Rated Capacity: 375 tons/hr

Emission Unit vented through this Emission Point: 8.04
Emission Unit Description: Soybean Co-Product Loadout
Raw Material/Fuel: Meal and Hulls
Rated Capacity: 8 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S4

Pollutant: PM_{10}
Emission Limit(s): 0.5 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S4

Pollutant: Particulate Matter
Emission Limit(s): 1.0 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: 567 IAC 23.4(7)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
The control equipment shall be maintained according to the manufacturer's specifications.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 120
Stack Diameter (inches): 30
Stack Exhaust Flow Rate (scfm): 20,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Opacity
1st Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
Test Method – 40 CFR 60, Appendix A, Method 9[(1)]
[(1)] or an approved alternative
Test Run Time – 1 hour.
Authority for Requirement - Iowa DNR Construction Permit 95-A-329-S4 (issued 4/2/03)

Pollutant – PM_{10}
1st Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
Test Method – 40 CFR 51, Appendix M, 201 with 202[(1)]
[(1)] or an approved alternative
Test Run Time – 9.5 hours.
Authority for Requirement - Iowa DNR Construction Permit 95-A-329-S4 (issued 4/2/03)

Pollutant – Particulate Matter
1st Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
Test Method – Iowa Compliance Sampling Manual Method 5[(1)]
[(1)] or an approved alternative
Test Run Time – 3 hours.
Authority for Requirement - Iowa DNR Construction Permit 95-A-329-S4 (issued 4/2/03)

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the

day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 9.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 9.01
Emissions Control Equipment ID Number: 9.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 9.01
Emission Unit Description: Material Storage Bin
Raw Material/Fuel: Clay
Rated Capacity: 15 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-330

Pollutant: PM_{10}
Emission Limit(s): 0.034 lb./hr, 0.15 Tons/yr, 0.005 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-330

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Monitoring:

The stack exhaust shall be observed once per week and the presence/lack of a visible plume noted. If visible emissions are noted, the baghouse shall be inspected and necessary repairs completed within 24 hours of the observation. If, after 24 hours repairs have not been completed, the source shall be shutdown until they have been completed. The Department shall be notified of the exceedance and completion of the repairs within 24 hours of each respectively.

Authority for Requirement: Iowa DNR Construction Permit 95-A-330

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 45.3
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): 800
Stack Temperature (^{o}F): ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-330

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 10.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 10.01
Emissions Control Equipment ID Number: 10.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 10.01
Emission Unit Description: Clay Handling
Raw Material/Fuel: Clay
Rated Capacity: 15 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-331

Pollutant: PM_{10}
Emission Limit(s): 0.021 lb./hr, 0.09 Tons/yr, 0.005 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-331

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Monitoring:

The stack exhaust shall be observed once per week and the presence/lack of a visible plume noted. If visible emissions are noted, the baghouse shall be inspected and necessary repairs completed within 24 hours of the observation. If, after 24 hours repairs have not been completed, the source shall be shutdown until they have been completed. The Department shall be notified of the exceedance and completion of the repairs within 24 hours of each respectively.

Authority for Requirement: Iowa DNR Construction Permit 95-A-331

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 40.8
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): 500
Stack Temperature (^{o}F): ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-331

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 11.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 11.01
Emissions Control Equipment ID Number: 11.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 11.01
Emission Unit Description: Bean Tank Conveying
Raw Material/Fuel: Soybeans
Rated Capacity: 243 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 0.48 lb./hr, 0.002 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5
567 IAC 23.4(7)

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c))

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 60
Stack Diameter (feet): 3.17
Stack Exhaust Flow Rate (acfm): 28,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 12.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 12.01
Emissions Control Equipment ID Number: 12.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 12.01
Emission Unit Description: Elevator Aspiration - Conveying
Raw Material/Fuel: Soybeans
Rated Capacity: 243 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-333-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 0.46 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-333-S5

Pollutant: Particulate Matter
Emission Limit(s): 1.0 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-333-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-333-S5
567 IAC 23.4(7)

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-333-S5
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 27
Stack Exhaust Flow Rate (scfm): 18,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 95-A-333-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐

Authority for Requirement: 567 IAC 22.108(3)

CAM Plan for EP 12 Baghouse

I. Background

A. Emissions Unit

Description:	Elevator A Aspiration
Identification:	EP 12
Facility:	Cargill Oilseeds Processing Sioux City, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	Permit # 95-A-333-S5
Particulate emission limit:	1 lb/hr PM, 0.46 lb/hr PM-10
Opacity emission limit:	0%
Current Monitoring requirements:	Stack Testing, weekly opacity readings.

C. Control Technology
Fabric Filter

II. Monitoring Approach

A. Indicator
Daily pressure drop checks will be used as an indicator.

B. Measurement Approach
Pressure drop will be checked daily to ensure that no pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range or a pressure drop greater than 5 inches of water occurs during the material handling operation of the unit.

C. Indicator Range
Pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range.
Pressure drop should not exceed 5 inches of H_2O.

D. QIP (Quality Improvement Plan) Threshold
The QIP threshold is six excursions in a six month reporting period

E. Performance Criteria

Data representativeness:	Pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range or an increase in pressure drop above 5 inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.

Verification of operational status:	Records of pressure drop readings will be maintained for five years.
QA/QC practices and criteria:	The facility shall check the pressure drop daily when the emission unit on this emission point is in operation. If a pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range or a pressure drop greater than four inches of water is observed, corrective action will be taken within 8 hours.
Monitoring frequency and data Collection procedure:	Pressure drop readings shall be conducted daily during a period when the emission unit on this emission point is in operation. Records of the readings shall be maintained for five years.

III. Justification

A. Background

This facility processes soybeans to extract vegetable oil. The pollutant specific emission unit is the bagfilter that controls emissions from various tanks and conveyors in the elevator portion of the facility. The controlled exhaust flow rate is approximately 17,000 actual cubic feet per minute.

B. Rationale for Selection of Performance Indicator

The daily pressure drop readings were selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. A pressure drop of greater than 1.5 inches of water below the recent normal operating range or an increase in pressure drop beyond 4.5 inches of water would indicate a reduced performance of this baghouse. Therefore, the detection of excessive pressure drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The selected indicator range is a pressure drop of greater than 1.5 inches of water below the recent normal operating range or an increase in pressure drop beyond 5 inches of water. If a pressure drop greater than the values noted is observed, corrective action will be taken within 8 hours.

The changes in pressure drop noted above were selected as indicator ranges because a pressure drop greater than these values are indicative of a potential increase in particulate emissions due to a decrease in the performance of this baghouse. If the baghouse is operating properly, there will not be a pressure drop greater than 5 inches of water except during start up, shut down, and upset conditions.

The selected QIP threshold for the baghouse is 6 excursions in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

Emission Point ID Number: 13.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 13.01 and 13.02
Emissions Control Equipment ID Number: 13.01 and 13.02
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 13.01
Emission Unit Description: Flaking
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 13.02
Emission Unit Description: Conveying
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S5

Pollutant: PM_{10}
Emission Limit(s): 1.75 lb./hr, 0.0113 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S5

Pollutant: Particulate Matter
Emission Limit(s): 1.75 lb./hr, 0.0113 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S5
567 IAC 23.4(7)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 85
Stack Diameter (inches): 36
Stack Exhaust Flow Rate (acfm): 19,000
Stack Temperature (^{o}F): 100
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Agency Cyclone Operation & Maintenance

Monitoring Guidelines
The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Continuous

- If the "High Level" probe in the cyclone sets off an alarm indicating pluggage, remedial action will take place immediately.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Inspect the solids discharge valve for proper operation.
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Inspect the hopper unloading components.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be remove to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Inspect, calibrate, and recommission the "High Level" probe before the system is returned to service.

Maintain a written record of the observations, deficiencies, and any action resulting from the inspection.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspections.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 13A

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 13A.01, 13A.02
Emissions Control Equipment ID Number:
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 13A.01
Emission Unit Description: Flaking
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Unit vented through this Emission Point: 13A.02
Emission Unit Description: Conveying
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S2

Pollutant: PM_{10}
Emission Limit(s): 0.2 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.4 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S2
567 IAC 23.4(7)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 35
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (acfm): 10,000
Stack Temperature (^{o}F): 100
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: 98-A-401-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Agency Cyclone Operation & Maintenance

Monitoring Guidelines
The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Continuous

- If the "High Level" probe in the cyclone sets off an alarm indicating pluggage, remedial action will take place immediately.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Inspect the solids discharge valve for proper operation.
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Inspect the hopper unloading components.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be remove to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Inspect, calibrate, and recommission the "High Level" probe before the system is returned to service.

Maintain a written record of the observations, deficiencies, and any action resulting from the inspection.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspections.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 15.00

Associated Equipment
Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 15.01
Emissions Control Equipment ID Number: 15.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 15.01
Emission Unit Description: Hull Transfer Storage
Raw Material/Fuel: Soybean Hulls
Rated Capacity: 20 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4

Pollutant: PM_{10}
Emission Limit(s): 0.02 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4
567 IAC 23.4(7)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 96
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (acfm): 800
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 16.00

Associated Equipment
Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 16.01
Emissions Control Equipment ID Number:
Emissions Control Equipment Description:

Applicable Requirements

Emission Unit vented through this Emission Point: 16.01
Emission Unit Description: Vegetable Oil Processing Hexane Emissions
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 887 Tons/yr Extraction Process VOC emission limit
Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

Pollutant: Hexane
Emission Limit(s): 0.19 gal./ton of soybeans processed
Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

Pollutant: Plant-wide Single Hazardous Air Pollutant (HAP)
Emission Rate: 9.4 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

Pollutant: Plant-wide Total Hazardous Air Pollutants (HAPs)
Emission Rate: 24.4 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

a. The solvent used in the extraction process shall be limited to isohexane. (Note: most of the isomers of hexane contained in the isohexane to be used are not regulated HAPs. However, the isohexane has trace amounts (approximately 1% or less) of n-hexane (CAS Number 110-54-3) that is a regulated HAP).
b. Plant-wide HAPs shall not exceed 9.4 tons for any single HAP and 24.4 tons for all HAPs per twelve-month rolling total.
c. Isohexane usage shall not exceed 313,982 gallons per twelve-month rolling total.
d. VOC content of the isohexane shall not exceed 5.65 lbs/gallon.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

a. Plant-wide total isohexane usage in gallons for each month.
b. Plant-wide total isohexane usage in gallons per twelve-month rolling total.
c. On a monthly basis, one lot of isohexane shall be analyzed for n-hexane content.
d. The total amount of soybeans processed, in tons for each month.
e. The total amount of soybeans processed, in tons per twelve-month rolling total.
f. Calculate and record the monthly and the twelve-month rolling total of gallons of hexane lost per ton of beans processed. The twelve-month rolling total shall be used to verify compliance with the PSD BACT limit of 0.19 gallons hexane lost per ton of soybeans processed.
g. Maintain MSDS sheets of the solvent used in the extraction process.
h. Plant-wide, record the emission of each HAP and all HAPs in tons per twelve-month rolling total.

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 54
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (acfm): N/A
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐

Authority for Requirement: 567 IAC 22.108(3)

CAM Plan for EP 16 Mineral Oil Scrubber for Isohexane

I. Background

A. Emissions Unit
Description: Final Vent and Fugitives
Identification: EP 16
Facility: Cargill, Sioux City

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: Iowa Permit #95-A-337-S4
VOC emission limit: 887 tons/yr
Monitoring Requirements: Mineral oil scrubber (MOS) operating parameters.

C. Control Technology
Mineral oil scrubber (MOS)

II. Monitoring Approach

A. Indicators
Calculated 12-month rolling total hexane losses, mineral oil temperature and flow rate will be used as indicators.

B. Measurement Approach
Mass-balance calculations will use the facility's hexane purchase records. The scrubber's mineral oil flow rate and temperature are monitored.

C. Indictor Ranges
The indicator levels for the scrubber are a mineral oil flow rate between 5 and 60 gallons per minute and a mineral oil temperature between 40 and 110 degrees F.

D. QIP (Quality Improvement Plan) Threshold
The QIP thresholds are six excursions total of either the mineral oil flow rate or the mineral oil temperature in one six month reporting period or one instance of 12-month rolling total hexane emissions greater than 887 tons. The 12-month rolling totals will be recalculated and recorded each month.

E. Performance Criteria
Data representativeness: The mineral oil scrubber is designed to operate at maximum control efficiency at specific mineral oil flow rate and temperature ranges. The scrubber equipment has real-time sensors for both flow rate and temperature, which are recorded a minimum of once per day. If the flow rate or

	temperature has drifted out of the optimal efficiency range, this is an indication of the potential for increased hexane emissions. Facility hexane loss, determined from hexane make-up solvent purchases, is representative of the scrubber's operation.
Verification of operational status:	Mineral oil flow rate and temperature are monitored to insure proper operation of the mineral oil scrubber. The scrubber equipment will be maintained in good working condition according to the manufacturer's O&M procedures.
QA/QC practices and criteria:	Monitoring the mineral oil flow rate and temperature will serve to alert the facility in circumstances when the mineral oil scrubber experiences short-term excursions. Any recorded flow rate or temperature outside of the indicator range will signify an excursion. When an excursion occurs, corrective action will be initiated within 8 hours, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.
Monitoring frequency and data collection procedures:	The mineral oil flow rate and temperature sensors provide real-time readings which are recorded a minimum of once per day when the facility's emission unit is in operation. Facility hexane losses will be calculated using material mass balance. Hexane losses will be assumed to equal all new hexane purchases made to maintain the facility's inventory. Each month, the facility calculates and records the 12-month rolling total hexane emissions for the facility.

III. Justification

A. Background

This facility processes soybeans to extract vegetable oils. The pollutant specific emission unit is the seed oil extraction and refinement unit that uses hexane as solvent. Hexane emissions are controlled by a Mineral Oil Scrubber.

B. Rationale for Selection of Performance Indicator

The scrubber's mineral oil flow rate and temperature were selected as the performance indicators as they are indicative of operation of the scrubber in a manner necessary to maximize collection and reuse of hexane and minimize emissions. An excursion of these indicators out of the optimal operating range indicates a possibility of reduced performance of the scrubber.

Facility 12-month rolling total hexane emissions are used as long-term performance indicator. An excursion of this indicator suggests generalized reduced performance of the mineral oil scrubber.

C. Rationale for Selection of Indicator Level

The mineral oil scrubber flow rate and temperature ranges are 5 to 60 gallons per minute and 40 to 110 F, respectively. These indicator ranges were selected because operation of the scrubber outside the optimal ranges for these parameters is indicative of a potential for increased hexane emissions.

The selected QIP thresholds are six excursions total of either the mineral oil flow rate or the mineral oil temperature in one six month reporting period or one instance in which the facility's 12-month rolling total hexane emissions exceed 887 tons. The 12-month rolling totals will be recalculated and recorded each month. This level is the facility's permitted annual emissions limit for hexane. If a QIP threshold is exceeded once, a QIP will be developed and implemented.

Emission Point ID Number: EP 17

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 17.01

Applicable Requirements

Emission Unit vented through this Emission Point: 17.01
Emission Unit Description: External Combustion Boiler
Raw Material/Fuel: Natural Gas
Rated Capacity: 97 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limit(s): 0.70 lb./hr, 0.2 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb./MMBtu
Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S3
567 IAC 23.3(2)"b"(2)

Pollutant: Particulate Matter
Emission Limit(s): 0.70 lb./hr, 0.2 Tons/yr, 3 lb./MMCF
Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

This unit is limited to the combustion of natural gas only and is limited to operation as a backup to Boiler Number Three (#3). Only one of Boilers #2 and #3 shall be operating at any given time except for periods of startup and shutdown of the boilers.

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 38.5
Stack Diameter (inches): 36
Stack Exhaust Flow Rate (acfm): 22,900
Stack Temperature (^{o}F): 320
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Periodic Monitoring requirements are satisfied by the requirement to burn only natural gas.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 18.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 18.01

Applicable Requirements

Emission Unit vented through this Emission Point: 18.01
Emission Unit Description: Dowtherm Boiler (External Combustion Boiler)
Raw Material/Fuel: Natural Gas and Fuel Oil
Rated Capacity: 8.6 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

Pollutant: PM_{10}
Emission Limit(s): 0.12 lb./hr, 0.54 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb./MMBtu
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3
567 IAC 23.3(2)'b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 9.9 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3
567 IAC 23.3(3)"b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.26 lb./hr 5.5 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.035 lb./hr, 0.15 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput:
a. Maximum percent sulfur in fuel oil used in the boiler shall be 0.25%.
b. Maximum fuel oil used shall not exceed 528,000 gallons per twelve month rolling period.

Records shall be maintained onsite for the following:
a. Monthly consumption and rolling twelve month total of each fuel used in the boiler.
b. Percent sulfur in the fuel oil for each lot.

Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 25
Stack Diameter (inches): 24
Stack Exhaust Flow Rate (acfm): 5,000
Stack Temperature (^{o}F): 600
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 95-A-338-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

While burning fuel oil, the facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not

return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>10%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 19.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 19.01

Applicable Requirements

Emission Unit vented through this Emission Point: 19.01
Emission Unit Description: Reformer (External Combustion Boiler)
Raw Material/Fuel: Natural Gas
Rated Capacity: 11.7 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-339

Pollutant: PM_{10}
Emission Limit(s): 0.068 lb./hr, 0.3 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-339

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb./MMBtu
Authority for Requirement: 567 IAC 23.3(2)'b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 1.64 lb./hr, 7.2 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-339

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

This boiler must use natural gas exclusively for the purposes of fueling the burner.

Authority for Requirement: Iowa DNR Construction Permit 95-A-339

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 31.5
Stack Diameter (feet): 1.33
Stack Exhaust Flow Rate (acfm): 4,000
Stack Temperature (^{o}F): 425.26
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 95-A-339

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Periodic Monitoring requirements are satisfied by the requirement to burn only natural gas.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 20

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 20.01
Emissions Control Equipment ID Number: 20.01
Emissions Control Equipment Description: Bagfilter

Applicable Requirements

Emission Unit vented through this Emission Point: 20.01
Emission Unit Description: Conveying
Raw Material/Fuel: Soybean Hulls
Rated Capacity: 20 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3

Pollutant: PM_{10}
Emission Limit(s): 0.05 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.10 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3
567 IAC 23.4(7)

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
The daily averaged processing rate of the pellet cooler shall not exceed 15 tons per hour. This limit was requested by the applicant

Reporting & Record keeping:
Records shall be maintained to document that this rate is not exceeded. If this rate is exceeded, then compliance shall be verified within sixty (60) days. The test shall be conducted with the

equipment operating in a manner representative of full rated capacity. Failure to test at this maximum may be cause to limit the source to operating at the level at which the compliance tests were conducted.

Authority for Requirement: 567 IAC 22.108(14)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 96
Stack Diameter (inches): 7 x 9
Stack Exhaust Flow Rate (acfm): 2000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 21.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 21.01 and 21.02

Applicable Requirements

Emission Unit vented through this Emission Point: 21.01
Emission Unit Description: Grain Dryer
Raw Material/Fuel: Soybeans
Rated Capacity: 195 Tons/hr soybeans

Emission Unit vented through this Emission Point: 21.02
Emission Unit Description: Grain Dryer, Burner
Raw Material/Fuel: Natural Gas
Rated Capacity: 40 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 1.8 lb./hr, 0.00175 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

Pollutant: Particulate Matter
Emission Limit(s): 10.6 lb./hr, 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.9 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

a. The operation of the bean pre-cleaner system (EP#1 Grain Cleaner) is required whenever the Grain Dryer (EP21) is in operation.
b. The column dryer shall have column plate perorations not to exceed 2.4 mm in diameter (ca 0.094 inch).

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. Maintain log of bean pre-cleaner system (EP#1 Grain Cleaner) operation and Berico Grain Dryer (EP21) operation, which shall include date and time each unit is operated.
b. Verify and record diameter of column plate perorations within 60 days after the issuance of this permit and upon replacement or modification of column plates.

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve

compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 21
Stack Diameter (inches): N/A
Stack Exhaust Flow Rate (acfm): 124,000
Stack Temperature (^{o}F): 80
Vertical, Unobstructed Discharge: Yes ☐ No ☒ Horizontal Discharge
Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 22

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 22.01 and 22.02

Applicable Requirements

Emission Unit vented through this Emission Point: 22.01
Emission Unit Description: Grain Dryer II
Raw Material/Fuel: Soybeans
Rated Capacity: 93 Tons/hr soybeans

Emission Unit vented through this Emission Point: 22.02
Emission Unit Description: Grain Dryer II, Burner
Raw Material/Fuel: Natural Gas
Rated Capacity: 40 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 0.98 lb./hr, 0.00175 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

Pollutant: Particulate Matter
Emission Limit(s): 5.6 lb./hr, 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.9 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

a. The operation of the bean pre-cleaner system (EP#1 Grain Cleaner) is required whenever the Grain Dryer II (EP22) is in operation.
b. The column dryer shall have column plate perorations not to exceed 2.4 mm in diameter (ca 0.094 inch).

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. Maintain log of bean pre-cleaner system (EP#1 Grain Cleaner) operation and Grain Dryer II (EP22) operation, which shall include date and time each unit is operated.
b. Verify and record diameter of column plate perorations within 60 days after the issuance of this permit and upon replacement or modification of column plates.

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

NSPS Requirements:

Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 65.5
Stack Diameter (inches): N/A
Stack Exhaust Flow Rate (acfm): 67,000
Stack Temperature (^{o}F): 80
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒ Horizontal Discharge
Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 23.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 23.01

Applicable Requirements

Emission Unit vented through this Emission Point: 23.01
Emission Unit Description: Boiler #3
Raw Material/Fuel: Natural Gas and Fuel Oil
Rated Capacity: 184.3 MMBtu/hr natural gas and 175.7 MMBtu/hr fuel oil

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0% (gas), 10% (oil)
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4

Pollutant: PM_{10}
Emission Limit(s): 2.5 lb./hr (oil), 5.06 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb./ MMBtu
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4
567 IAC 23.3(2)"b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 45.47 lb./hr (oil), 29.28 Tons/yr, 2.5 lb./MMBtu
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4
567 IAC 23.3(3)"b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 10.1 lb./hr (gas), 21.1 lb./hr (oil), 50.66 Tons/yr
0.2 lb./MMBtu (gas and oil)
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4
567 IAC 23.1(2) ccc
40 CFR 60 Subpart Db

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.3 lb./hr (oil), 5.06 Tons/yr
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

a. Only one of Boilers #2 and #3 shall be operated at any given time except for periods of startup and shutdown of the two boilers.
b. Maximum steam capacity shall be 150,000 pounds of steam per hour.
c. Primary fuel shall be natural gas.
d. Backup fuel shall be #2 fuel oil, or vegetable oil. The #2 fuel oil shall not exceed 0.25 percent by weight for sulfur and 0.05 percent by weight for nitrogen. The vegetable oil shall not exceed 0.15 percent by weight for sulfur.
e. The total quantity of #2 fuel oil or vegetable oil combusted shall not exceed 1.6 million gallons per twelve-month rolling total.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. Record the total quantity of #2 fuel oil and vegetable oil combusted (in gallons) per twelve-month rolling total.
b. Maintain records as to the sulfur content (% by weight) of the vegetable oil.
c. Records shall be maintained per 40 CFR 60.40b - NSPS Subpart Db.

Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4

Predictive Emission Monitoring (PEM) for Nitrogen Oxides (NOx)

The PEM program will include the following parameters: flue gas flow and oxygen content in the boiler (from *in situ* analyzer).

Records shall be maintained on-site for a period of five years for the following:

1. The steam generating unit load per NSPS 40 CFR 60 Subpart Db.
2. The average hourly NOx emission rates in both lb/hr and lb/MMBtu.
3. The 30-day average NOx emission rates calculated at the end of each steam generating unit operating day in both lb/hr and lb/MMBtu.
4. Identification of any violation of the permitted allowable NOx limit.
5. Identification of any days for which data have not been obtained, including reasons for not obtaining data and a description of actions taken.
6. Identification of times when emissions data have been excluded from the calculation of the average emission rates and the reasons for excluding data.

7. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted.

PEM Operating Procedure

- Computer shall show readings updated every 60 minutes. If PEM is down contact supervisor and Cargill Corporate Information Technologist.
- After each PEM operating day (midnight to midnight) print out the daily report.
- Record on the daily report (if necessary, attach a(n) additional sheet(s)):
  1) PEM downtime, including the date, the starting and ending times, the reason for the malfunction, and any corrective action taken.
  2) Any exceedances of the NO_x limit, the circumstances that caused the exceedance(s), the date, the starting and ending times of the event, and any corrective action taken.
  3) Boiler downtime, including the date, the starting and ending times, and verification that the PEM is recording zero NO_x emissions for each period.
- Record in the quarterly report:
  1) PEM downtime, including the date, the starting and ending times, the reason for the malfunction, and any corrective action taken.
  2) Any exceedances of the NO_x limit, the circumstances that caused the exceedance(s), the date, the starting and ending times of the event, and any corrective action taken.
  3) Boiler downtime, including the date, the starting and ending times, and verification that the PEM is recording zero NO_x emissions for each period.
- All daily records shall be filed in the designated area.
- An alternative method of determining NO_x emissions shall be in place when the PEM downtime exceeds eight (8) days in any 30-day period.

Quality Assurance/Quality Control (QA/QC) for PEM

In order to ensure the accuracy of the PEM data, the attached QA/QC plan shall be followed. See Appendix A.

NSPS General Requirements:

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 100
Stack Diameter (inches): 60
Stack Exhaust Flow Rate (dscfm): 33,000
Stack Temperature (^{o}F): 330
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 24.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 24.01
Emissions Control Equipment ID Number: 24.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 24.01
Emission Unit Description: Trisyl Pneumatic Conveying
Raw Material/Fuel: Trisyl
Rated Capacity: 36,000 scf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 5%
Authority for Requirement: Iowa DNR Construction Permit 94-A-506

Pollutant: PM_{10}
Emission Limit(s): 0.026 lb./hr, 0.114 Tons/yr, 0.00506 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-506

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 41
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (acfm): 600
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 94-A-506

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>5 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 25.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 25.01
Emissions Control Equipment ID Number: 25.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 25.01
Emission Unit Description: Trisyl Storage Tank
Raw Material/Fuel: Trisyl
Rated Capacity: 48,000 scf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 5%
Authority for Requirement: Iowa DNR Construction Permit 94-A-507

Pollutant: PM_{10}
Emission Limit(s): 0.03 lb./hr, 0.13 Tons/yr, 0.005 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-507

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 45
Stack Diameter (inches): 5 x 4.5 (rectangular stack)
Stack Exhaust Flow Rate (acfm): 800
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 94-A-507

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>5 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 26.00

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 26.01 and 26.02
Emissions Control Equipment ID Number: 26.00
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 26.01
Emission Unit Description: Grain Receiving-Truck Dump
Raw Material/Fuel: Soybeans
Rated Capacity: 700 Tons/hr

Emission Unit vented through this Emission Point: 26.02
Emission Unit Description: Grain Receiving-Conveyors & Legs
Raw Material/Fuel: Soybeans
Rated Capacity: 700 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4
567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: Opacity (Fugitive)
Emission Limit(s): 5%
Authority for Requirement: 567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Pollutant: PM_{10}
Emission Limit(s): 0.87 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

Pollutant: Particulate Matter
Emission Limit(s): 1.8 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: 567 IAC 23.4(7)

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr./dscf
Authority for Requirement: 567 IAC 23.1(2) ooo
40 CFR 60 Subpart DD

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
The control equipment shall be maintained according to the manufacturer's specifications.

Process throughput:
Bean Truck Receiving II shall not receive more than 700 tons of beans per hour, averaged daily.
Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

b. The owner or operator shall maintain a record of the amount of beans that are received at Bean Truck Receiving II each day that it receives beans.

c. The owner or operator shall maintain a record of the amount of time Bean Truck Receiving II receives beans each day that it receives beans.

d. The owner or operator shall calculate the average daily throughput of Bean Truck Receiving II in tons of beans per hour by dividing the amount of beans that are received at Bean Truck Receiving II each day by the amount of time Bean Truck Receiving II receives beans each day.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Requirements:
Method 9 and the procedures in 40 CFR 60.11(b) shall be used to determine opacity. The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12
Authority for Requirement: 567 IAC 23.1(2)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 150
Stack Diameter (inches): 38
Stack Exhaust Flow Rate (scfm): 34,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 27

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 27.01
Emissions Control Equipment ID Number: 27.01
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 27.01
Emission Unit Description: Bean Conditioner
Raw Material/Fuel: Soybeans
Rated Capacity: 187.5 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S2

Pollutant: PM_{10}
Emission Limit(s): 0.14 lb./hr, 0.01 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.28 lb./hr, 0.02 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S2
567 IAC 23.4(7)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 20
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (acfm): 2,000
Stack Temperature (^{o}F): 200
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Agency Cyclone Operation & Maintenance

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Continuous

- If the "High Level" probe in the cyclone sets off an alarm indicating pluggage, remedial action will take place immediately.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no

later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Inspect the solids discharge valve for proper operation.
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Inspect the hopper unloading components.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be remove to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Inspect, calibrate, and recommission the "High Level" probe before the system is returned to service.

Maintain a written record of the observations, deficiencies, and any action resulting from the inspection.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspections.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 28

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 28.01
Emissions Control Equipment ID Number: 28.01
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 28.01
Emission Unit Description: Pellet Cooler
Raw Material/Fuel: Soybean Hulls
Rated Capacity: 20 Tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

Pollutant: PM_{10}
Emission Limit(s): 0.16 lb./hr, 0.003 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.32 lb./hr, 0.006 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4
567 IAC 23.4(7)

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
The daily averaged processing rate of the pellet cooler shall not exceed 15 tons per hour.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. The owner or operator of the equipment shall keep adequate records to show the daily averaged processing rate of the pellet cooler (in tons per hour).

Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 55
Stack Diameter (inches): 21
Stack Exhaust Flow Rate (scfm): 6,100
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Agency Cyclone Operation & Maintenance

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with

emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Continuous

- If the "High Level" probe in the cyclone sets off an alarm indicating pluggage, remedial action will take place immediately.

Weekly

- Visible emissions shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedance not a violation and corrective action will be taken as soon as possible, but no later than eight (8) hours. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to re-observe visible emissions at approximately 2-hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the following day.

Maintain a written record of the observation and any action resulting from the inspection.

Quarterly

- Inspect the solids discharge valve for proper operation.
- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Annually

- Inspect the hopper unloading components.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be remove to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Inspect, calibrate, and recommission the "High Level" probe before the system is returned to service.

Maintain a written record of the observations, deficiencies, and any action resulting from the inspection.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping

- Maintain a record of all inspections and any action resulting from the inspections.
- Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 29

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 29.01

Applicable Requirements

Emission Unit vented through this Emission Point: 29.01
Emission Unit Description: Deodorizing System Boiler
Raw Material/Fuel: Natural Gas
Rated Capacity: 13 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb./MMBtu
Authority for Requirement: Iowa DNR Construction Permit 99-A-677
567 IAC 23.3(2)"b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements:
The owner/operator of this equipment shall comply with the following operational limits and requirements.

Process throughput:
This unit is restricted to the combustion of natural gas only.
Authority for Requirement: Iowa DNR Construction Permit 99-A-677

Records shall be maintained onsite for the following:
Monthly consumption of the fuel used in the boiler.
Authority for Requirement: Iowa DNR Construction Permit 99-A-677

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 38
Stack Diameter (feet): 2.0
Stack Exhaust Flow Rate (acfm): 5,800
Stack Temperature (^{o}F): 600
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒
Authority for Requirement: Iowa DNR Construction Permit 99-A-677

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Periodic Monitoring requirements are satisfied by the requirement to burn only natural gas.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 30

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 30
Emissions Control Equipment ID Number: CE 30
Emissions Control Equipment Description: Bin Vent Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 30
Emission Unit Description: Meal Flow Additive Tank (100 tons)
Raw Material/Fuel: Soybean
Rated Capacity: 187.5 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): No Visible Emissions[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1
567 IAC 23.3(2)"d"

[(1)] If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standard. This standard is in lieu of an initial compliance test for PM.

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1

Operational Limits & Requirements:
The owner/operator of this equipment shall comply with the following operational limits and requirements.

Control equipment parameters:
The control equipment associated with the emission unit that exhausts from this emission point shall be maintained according to the manufacturers specifications.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 65
Stack Diameter (inches): 7
Stack Exhaust Flow Rate (scfm): 600 (when filling)
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒ Horizontal Discharge
Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter(1)
1st Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.(2)
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - Iowa DNR Construction Permit 02-A-282-S1 (issued 12/2/02)

(1) Each test run shall be no less than 1 hours.
(2) If the Opacity test indicates that there are no visible emissions from this emission point, the stack test for PM is to be waived.

Pollutant - Opacity
1st Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
Test Method - 40 CFR 60, Appendix A, Method 22
Authority for Requirement - Iowa DNR Construction Permit 02-A-282-S1 (issued 12/2/02)

(1) Each test run shall be no less than 1 hours.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 31

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 31
Emissions Control Equipment ID Number: CE 31
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 31
Emission Unit Description: Soybean CoProduct System Aspiration
Raw Material/Fuel: Soybean
Rated Capacity: 187.5 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: Iowa DNR Construction Permit 02-A-554
567 IAC 23.3(2)"d"

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, the presence of visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.005 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 02-A-554

Operational Limits & Requirements:
The owner/operator of this equipment shall comply with the following operational limits and requirements.

Control equipment parameters:
The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 02-A-554

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 65
Stack Diameter (inches): 22
Stack Exhaust Flow Rate (scfm): 9,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-554

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter(1)
1st Stack Test to be Completed by (date) - demonstrated compliance on June 5, 2003
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - Iowa DNR Construction Permit 02-A-554 (issued 9/15/02)

(1) Each test run shall be no less than 3.5 hours.

Pollutant - Opacity
1st Stack Test to be Completed by (date) - demonstrated compliance on June 5, 2003
Test Method - 40 CFR 60, Appendix A, Method 9
Authority for Requirement - Iowa DNR Construction Permit 02-A-554 (issued 9/15/02)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 32

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 32
Emissions Control Equipment ID Number: CE 32
Emissions Control Equipment Description: Fabric Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 32
Emission Unit Description: Soybean CoProduct Loadout System
Raw Material/Fuel: Soybean CoProduct
Rated Capacity: 8 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: Iowa DNR Construction Permit 02-A-555
567 IAC 23.3(2)"d"

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, the presence of visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.005 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 02-A-555

Operational Limits & Requirements:
The owner/operator of this equipment shall comply with the following operational limits and requirements.

Control equipment parameters:
The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

a. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 02-A-555

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 97
Stack Diameter (inches): 7 x 9
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒ Horizontal discharge
Authority for Requirement: Iowa DNR Construction Permit 02-A-555

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter
1st Stack Test to be Completed by (date) - demonstrated compliance on June 3 & 4, 2003
Test Method - Iowa Compliance Sampling Manual Method 5[(1)]
[(1)] or an approved alternative
Authority for Requirement - Iowa DNR Construction Permit 02-A-555 (issued 9/15/02)
Test Run Time – Each test run shall be no less than 3.5 hours.

Pollutant - Opacity
1st Stack Test to be Completed by (date) - demonstrated compliance on June 3 & 4, 2003
Test Method - 40 CFR 60, Appendix A, Method 9
Authority for Requirement - Iowa DNR Construction Permit 02-A-555 (issued 9/15/02)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 33

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): 33

Applicable Requirements

Emission Unit vented through this Emission Point: 33
Emission Unit Description: Vegetable Oil Refinery
Raw Material/Fuel: Vegetable Oil
Rated Capacity: 900,000,000 lbs/yr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 36 Tons/yr(1)
Authority for Requirement: Iowa DNR Construction Permit 03-A-028
(1) Limit is for VOCs from oil from outside suppliers, all VOCs from oil produced at this plant is accounted for in Construction Permit Number 95-A-337-S4

Note: This limit encompasses the VOC emissions increase from EP 9, EP 10, EP 19, EP 23, EP 24 and EP 25 resulting from the processing of vegetable oil received from off-site.

Operational Limits & Requirements:
The owner/operator of this equipment shall comply with the following operational limits and requirements.

Process throughput:
a. The amount of vegetable oil produced by outside suppliers that is processed in the Refinery Process at this plant (Plant Number: 97-01-001) shall not exceed 720,000,000 pounds per rolling twelve-month period.

b. The amount of total vegetable oil processed in the Refinery Process at this plant (Plant Number: 97-01-001) shall not exceed 900,000,000 pounds per rolling twelve-month period.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.
a. Record the total amount of vegetable oil that is processed in the Refinery Process at this plant (Plant Number: 97-01-001) per month and calculate a rolling twelve-month total.

b. Record the amount of vegetable oil produced by outside suppliers that is processed in the Refinery Process at this plant (Plant Number: 97-01-001) per month and calculate a rolling twelve-month total.

c. Record the VOC content of all vegetable oil produced by outside suppliers that is processed in the Refinery Process at this plant (Plant Number: 97-01-001). Use the VOC contents to calculate the VOC emissions from vegetable oil produced by outside suppliers each month and calculate a rolling twelve-month total, assuming all VOCs contained in the oil are emitted from the Refinery Process.

d. Record the solvent (commercial Hexane or Isohexane) used during the extraction process for all vegetable oil produced by outside suppliers that is processed in the Refinery Process at this plant (Plant Number: 97-01-001).

Authority for Requirement: Iowa DNR Construction Permit 03-A-028

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides

for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
d. The changes are not subject to any requirement under Title IV of the Act.
e. The changes comply with all applicable requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically

altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.
Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.
567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1004 W. Madison
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix A: PEM Quality Assurance/Quality Control Plan

QUALITY ASSURANCE/QUALITY CONTROL

The Quality Assurance/Quality Control (QA/QC) program is essential for maintaining the accuracy of the PEM data. The proposed QA/QC program includes frequent (daily and weekly) and less frequent (monthly/quarterly) checks of the protocol. Table 1 shows the proposed inspection schedule.

TABLE 1: BOILER #3 QA/QC PROGRAM

Daily –	The boiler supervisor will inspect the PI data collection system to ensure all boiler parameters are being logged and NOx emission rates are being calculated in accordance with the operations monitoring program. Corrective action will be taken immediately in the event of a malfunction. A record of each daily inspection, downtime (when applicable), corrective action, and reasons for downtime will be logged by the operator. The boiler supervisor will ensure that the daily emission report summary is printed out and filed. The computer's hard drive will be backed-up nightly to ensure no significant loss of data or software.
Weekly	The Boiler Supervisor will review the previous week's daily emission reports and ensure that all reports have been properly filed. Missing reports will be reprinted and filed.
Quarterly	The Quarterly Reports will be printed out and reviewed. These reports will be sent in to IDNR with the proper form by the 30th day after the end of the quarter.
Annually	Per manufacturer's specifications, the flue gas flow meter and the boiler in situ O2 monitor will be inspected and calibrated during the annual shutdown.

Quality Assurance Plan Organization

The organization responsible for implementation of the QA/QC plan is as follows:

Maintain Records/Logs	Boiler Supervisor
Report Preparation	Plant Production Supervisor and TEC
Daily Tasks	Boiler Supervisor
Weekly Checks	Boiler Supervisor
Annual Inspections	Boiler Supervisor and Contractors
Report Review & Submittals	Plant Superintendent

Spare Parts

The plant will maintain a complete line of spare parts and transmitters for proper operation of the boiler controls and PI data acquisition system.

QA/QC Plan Review

The plant will review the QA/QC procedures on an annual basis. Based on results of the annual review, the plant will update the QA/QC plan as necessary.

V. Appendix B: Consent Order No. 2003-AQ-24

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER

IN THE MATTER OF:	ADMINISTRATIVE CONSENT ORDER
Cargill, Incorporated Sioux City, Iowa	NO. 2003-AQ-24

TO: Cargill, Incorporated
CT Corporation System, Registered Agent
2222 Grand Avenue
Des Moines, Iowa 50312

Cargill, Incorporated
c/o Steven J. Pace, Attorney
500 Firstar Bank Building
P.O. Box 2107
Cedar Rapids, Iowa 52406-2107

I. SUMMARY

This consent order is a stipulated settlement agreement entered into between Cargill, Incorporated (Cargill) and the Iowa Department of Natural Resources (DNR) for the purpose of resolving the following appeals concerning the Cargill, Incorporated plant located at 11th and Clark Street in Sioux City, Iowa: the appeal of Title V Operating Permit No. 99-TV-013, issued March 18, 1999; the appeal Title V Operating Permit No. 99-TV-013-M002, issued November 8, 1999; and the appeals of Air Quality Construction Permit Nos. 95-A-323-S3, 95-A-324-S3, 95-A-332-S3, 95-A-333-S3, 96-A-1253-S2, 95-A-325-S3, 95-A-326-S3, 98-A-400-S1, 95-A-327-S2, 95-A-328-S2, 95-A-329-S2, 95-A-334-S3, 98-A-401-S1, 95-A-336-S2, 98-A-402-S1, 98-A-404-S1, 98-A-405-S1, 95-A-337-S2, 95-A-337-S3, 86-A-036-S2, 95-A-340-S2, and 98-A-403-S1. In the interest of resolving all appealed matters between them, the parties have agreed to the provisions below.

II. STATEMENT OF FACTS

1. On June 1, 1998, DNR issued Air Quality Construction Permit Nos. 95-A-323-S2, 95-A-324-S2, 95-A-332-S2, 95-A-333-S2, 96-A-1253-S1, 95-A-325-S2, 95-A-326-S2, 98-A-400, 95-A-327-S1, 95-A-328-S1, 95-A-329-S1, 95-A-334-S2, 98-A-401, 95-A-336-S1, 98-A-402, 98-A-404, 98-A-405, 95-A-337-S1, 95-A-337-S2, 86-A-036-S1, 95-A-340-S1, and 98-A-403 to Cargill for its 11th and Clark Street plant in Sioux City, Iowa (Plant No. 97-01-001).

2. On October 8, 1998, DNR issued modifications to the original Air Quality Construction Permits. The modifications were Permit Nos. 95-A-323-S3, 95-A-324-S3, 95-A-332-S3, 95-A-333-S3, 96-A-1253-S2, 95-A-325-S3, 95-A-326-S3, 98-A-400-S1, 95-A-327-S2, 95-A-328-S2, 95-A-329-S2, 95-A-334-S3, 98-A-401-S1, 95-A-336-S2, 98-A-402-S1, 98-A-404-S1, 98-A-405-S1, 95-A-337-S2, 95-A-337-S3, 86-A-036-S2, 95-A-340-S2, and 98-A-403-S1, also issued to Cargill for its 11th and Clark Street plant in Sioux City, Iowa (Plant No. 97-01-001). A letter dated March 11, 1999, was sent to DNR, appealing these permit modifications. Letters from DNR to Cargill dated February 10, 1999, and April 5, 1999, stated DNR's position that the appeal period for the October 8, 1998, construction permits had passed and that the March 11, 1999, appeal letter was untimely. Cargill has maintained and continues to maintain that said appeals were timely. DNR's April 5, 1999, letter stated, however, that DNR would continue to discuss with Cargill its concerns regarding these 22 construction permits. Following discussions between the parties, Air Quality Construction Permits superseding the appealed permits were issued on October 29, 1999. Since the stipulated settlement agreement set out in this consent order disposes of the substantive issues in these construction permit appeals, the parties agree they do not have to reach agreement regarding the issue of the timeliness of the appeals.

3. On March 18, 1999, DNR issued Title V Operating Permit No. 99-TV-013 to Cargill for its 11th and Clark Street plant in Sioux City, Iowa (Plant No. 97-01-001). This permit was timely appealed.

4. Since the April 16, 1999, appeal of Title V Permit No. 99-TV-013, there have been three amendments to the Title V permit. On September 20, 1999, DNR issued an administrative amendment, numbered as Permit No. 99-TV-013-M001, concerning PEMS. On November 8, 1999, DNR issued a minor modification, numbered as Permit No. 99-TV-013-M002, adding Emission Point #29, a new boiler. Permit No. 99-TV-013-M002, was timely appealed on December 7, 1999. On February 8, 2000, DNR issued an administrative amendment, known as Permit No. 99-TV-013-M003, to correct citations to two construction permits.

5. In the interest of avoiding litigation and to resolve their differences, the parties have reached the agreement set forth in this document. The draft Title V Operating Permit agreed to between the parties is attached as Exhibit "A" and by this reference made a part hereof. The parties agree that it is their intention that the terms of the draft Title V operating permit set out in Exhibit "A"shall be the terms of the Title V operating permit for the Cargill, Incorporated plant located at 11th and Clark Streets in Sioux City, Iowa, for a five-year operating permit term beginning with the issuance of this renewal permit and ending five years from the date of issuance. DNR's intent with respect to that language of this draft permit is subject to change only upon consideration of comments received during required comment periods. The parties agree that the term of the Title V operating permit issued on March 18, 1999, shall end upon the issuance of this renewal permit.

6. According to the provisions of 567 Iowa Administrative Code section 22.116(1), DNR is required to allow the public, affected states and the U.S. Environmental Protection Agency an opportunity to comment regarding this Title V permit renewal. Cargill reserves the right to appeal any and all of the changes to the draft Title V operating permit which are made by DNR upon consideration of comments received during the required comment periods.

7. The draft Title V permit attached as Exhibit "A" shall become effective at such time as it is issued by DNR after the comment periods and after changes made to the permit by DNR made necessary by comments received during the required comment periods as set forth above, but said permit shall be subject to Cargill's right to appeal as set forth herein.

8. Subject to the above, with the issuance of this consent order, Cargill and DNR agree that all the issues raised in the appeals of Title V Operating Permit Nos. 99-TV-013, 99-TV-013-M002, and Air Quality Construction Permit Nos. 95-A-323-S3, 95-A-324-S3, 95-A-332-S3, 95-A-333-S3, 96-A-1253-S2, 95-A-325-S3, 95-A-326-S3, 98-A-400-S1, 95-A-327-S2, 95-A-328-S2, 95-A-329-S2, 95-A-334-S3, 98-A-401-S1, 95-A-336-S2, 98-A-402-S1, 98-A-404-S1, 98-A-405-S1, 95-A-337-S2, 95-A-337-S3, 86-A-036-S2, 95-A-340-S2, and 98-A-403-S1 are settled.

III. CONCLUSIONS OF LAW

1. Pursuant to the provisions of Iowa Code section 455B.134(9), which authorize the Director to issue any order necessary to secure compliance with Iowa Code Chapter 455B, Division II (air quality), and the rules promulgated and permits issued pursuant thereto, this Department has jurisdiction to issue this order.

2. Cargill's plant located at 11th and Clark Streets in Sioux City, Iowa, is a Title V affected facility within the meaning of 567 Iowa Administrative Code 22.101. This facility is required to have a Title V operating permit according to the provisions of 567 I.A.C. 22.101(1).

3. Iowa Code section 455B.133 provides for the Environmental Protection Commission to establish rules governing the quality of air and emission standards. Iowa Code section 455B.134(3) provides that the director of DNR shall grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing air contaminant sources and for related control equipment. Emissions units at this facility are sources of emissions to the outside atmosphere and require air quality construction permits according to the provisions of Iowa Code section 455B.134(3) and 567 I.A.C. 22.1(1).

4. The changes to Title V Operating Permit No. 99-TV-013-M002 which are intended to occur as a result of this administrative consent order will constitute a renewal of the Title V permit within the meaning of 567 I.A.C. 22.100. Therefore, according to the provisions of 567 I.A.C. 22.116(1), these changes require public participation, review by affected states, and review by EPA in accordance with the provisions of 567 I.A.C. 22.107(7).

IV. ORDER

Therefore, Cargill, Incorporated (Cargill) and the Iowa Department of Natural Resources (DNR) agree:

1. The draft Title V Operating Permit attached hereto as "Exhibit A" shall become the Title V operating permit for the Cargill, Incorporated plant located at 11th and Clark Streets in Sioux City, Iowa, for the term beginning with the issuance of this renewal permit and ending five years from the date of issuance, unless comments received from EPA, affected states or members of the public during the required comment periods necessitate, in the opinion of DNR, changes to the draft permit attached as Exhibit "A". The term of the Title V operating permit issued on March 18, 1999, shall end upon the issuance of this renewal permit.

2. In the event that DNR determines changes are necessary to the draft permit as the result of EPA, affected states or public comment, then the parties agree that DNR shall provide a draft of the proposed changes to Cargill within 30 days of the end of the EPA comment period. Cargill shall provide its written response to the draft of the proposed changes within 30 days of receipt of the proposed changes. If the parties cannot reach agreement regarding the proposed changes, then the parties shall meet to discuss the proposed changes at least once within 30 days of DNR's receipt of Cargill's written response. Cargill retains all its appeal rights regarding any such proposed changes.

3. Subject to the above, and with the issuance of this consent order, Cargill and DNR agree that the issues of the appeals of Title V Operating Permit No. 99-TV-013, 99-TV-013-M002, and Air Quality Construction Permit Nos. 95-A-323-S3, 95-A-324-S3, 95-A-332-S3, 95-A-333-S3, 96-A-1253-S2, 95-A-325-S3, 95-A-326-S3, 98-A-400-S1, 95-A-327-S2, 95-A-328-S2, 95-A-329-S2, 95-A-334-S3, 98-A-401-S1, 95-A-336-S2, 98-A-402-S1, 98-A-404-S1, 98-A-405-S1, 95-A-337-S2, 95-A-337-S3, 86-A-036-S2, 95-A-340-S2, and 98-A-403-S1 are settled.

V. WAIVER OF APPEAL RIGHTS

This order is entered into knowingly by and with the consent of Cargill. For that reason, Cargill waives its right to appeal this order or any part thereof, except as specified herein.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
ISSUED TO: Cargill, Incorporated

JEFFREY R. VONK, DIRECTOR
Iowa Department of Natural Resources

Dated this 8 day of July, 2003.

By: _____
Name: Douglas J Collison
Title: VP Operations NA Oilseeds Business
CARGILL, INCORPORATED

Dated this 5th day of May, 2003.

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